



# SEQUENCE LISTING

<110> FREEDMAN, JONATHAN H.  
LIAO, VIVIAN H.C.

<120> STRESSOR REGULATOR GENE

<130> 1579-315

<140> 09/437,450

<141> 1999-11-10

<150> 60/109,281

<151> 1998-11-20

<160> 72

<170> PatentIn Ver. 2.1

<210> 1

<211> 165

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 1

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tgttgtgtgtg tttattccct gacctatcca tattcccttc ttcccaatct ctaaagatat 120
acctgaaaac gaggtttttg aatacttgat acatttgtct tcatc 165
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<210> 2

<211> 154

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 2

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tggattgtgc ggggtgttact gccaaagtctg gtcgtgatag aaaacatcag gcgatcatgc 60
ctttacgtgg taagatcctg aacgtcgaaa agcaatggaa cataagatct acgaaaatga 120
ggagatcaaaa aacatgttta cagcttttgt ccta 154
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<210> 3

<211> 264

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 3

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tggattgtgc ggagtataag caaaaatttc tggaaaagtc gggatgatatg aagtttgata 60
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agatcttcaa tcaaaagctc ggtttcttgt tgttaaaaga ttccgcagga aaatgtctcc 120  
gagagtcctg gtcctcaa ataaattctac gaggcgatca aagaatacga gaaaatggag 180  
acaccagatg agcgattaac aaaagcacga gaaatttatc gatcatcata tacggttgaa 240  
ttccgtcgcg caatcgtcac actc 264

<210> 4  
<211> 187  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 4  
aaatttttat taaaataaaa taaacatggt tttgttgata ttatagcgtt aaagctgaaa 60  
tgacaatgat tagaaaacca gcagagaata gagatgatgt tcctttcgtt gttgtttcca 120  
gtgaacactt gttgcggtgg agcccgtatt tagcgagtgg tagtttttga tgtgattggt 180  
tccaatc 187

<210> 5  
<211> 267  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 5  
tggtactcca cctacaagtt ctacaagttc tacgagggtg tcctgatcga tccattccac 60  
aaggctatcc gtcgtaaccc agacacccaa tggatcacca agcctagtgc acaagcaccg 120  
tgagcaaaga ggactcacct ctgctggacg caagtctcgtg gactcggaaa gggattgctt 180  
ttctctgcta cccgcggagg atcccaacac caaagttttt ccaccgcga accgataaat 240  
cttgttattt tattttgttt tgggttt 267

<210> 6  
<211> 292  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 6  
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tggtgtgtgc gtttattccc tgaggtatcc atattccgct tctcccaatc tctaaagata 120  
tacctgaaaa cgagttgtcg tcgaaatact tgatacatgt tgtcttcacg ctggtgtatg 180  
ttgtttcgca aattcttcat actagttatg ataggatttg aatgagctgg cagagatcaa 240  
ctttgaactc gaatttcaat attttcgtga tcctgcatta agtgatgaat aa 292

<210> 7  
<211> 314  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 7

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gattttgatg atttggctcg ccgtttcgaa gaactgaaaa agattaagta atcatcaccc 120
gacgttccat tccttattaa ctatttgttt ctcttccacc caattttttt ttcacgtgtc 180
tttttttgta tcataaatga gacccccaaa aactagctgt ttcttagtgc atacgttaaa 240
acccttttag tcattgatta tcattgtata cctcattatc cgaaaaacct ttcgacattc 300
atcaactagg tttt 314
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<210> 8

<211> 189

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 8

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tctgagctag ggaccgaaat tcacaaatat ccaattgtta ctggatgggtg gggatgtgga 60
cgatttaatg gggacaagcc actgaagtgt atgttatttc attcggttaaa tatgaagatg 120
gaggagagtg aatggggatt ttgcttcttt tgcaaaatgg cctccctatg tacctgaaaa 180
aaaaaaaaa 189
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<210> 9

<211> 171

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 9

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tctgagctag gaaaggacgg agaagatgga gagaacggag ctgctggagc cgctggacca 60
aagggatctt gcgaccactg cccaccacca cgcactcccc aggatattaa ttcacttctc 120
tctaatttta gtgaatctca ttctaataaa aagccgcccc aaaaaaaaaa a 171
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<210> 10

<211> 289

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 10

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tttttttttt tttgagcgag cgtttattat ttgagtcgag cttgggttga gtcgtcagct 60
gaacatgaag attgacaaag aagacgatca gcagcaacag atgcgcagag tcgcattctt 120
tgcggttgct gtctcaactg cagccgtcat ttcaagcatc gtgactctcc caatgatcta 180
ctcttactct tcaatctttc caatcccatt tgatcattgg aaaccgagtt ctgtaaaact 240
gtgctcgtga tatgtggtgt cgaagttctc cacaagtcag gtgtaccct 289
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<210> 11  
<211> 162  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 11  
ctccaccgca acaagtgttc acgtggaaac aacaacgaaa ggaacatcat ctctatctct 60  
gctggttttc taatcattgt catttcagct ttaacgctat aatcaacaaa aacagtttat 120  
tttattttta taaaaattta ttcgtgcaaa aaaaaaaaaa aa 162

<210> 12  
<211> 140  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 12  
tagggcctgg ttgtgacaat gtgcactaaa atggggcatg aatatcacca gcagagttca 60  
cttaccctaaa gtgtacttat taagagtcaa ctgtgaagta tatgagacat ttcagttgcc 120  
tgcccaaaaa aaaaaaaaaa 140

<210> 13  
<211> 308  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 13  
tagttaggca caggatgtac gaggaaattc tactattttc gggctctcacc acgaaatcac 60  
aataaccgga attttttagt ggtccccgca cggtgaccta ctggcgctc aggcactccg 120  
ccgcgacatt cgccgacacg cctacaatcc acgtgtcaat cgtcagattt gcggatcaat 180  
aatggatgat aaaggtggaa atacgtatat ggatcatgtt caaaggcatc aagctgaaca 240  
attcgaagag ttgaatcggc gtcgacactt ttgatccaag accgtaagaa atttgaaagc 300  
tattggtg 308

<210> 14  
<211> 238  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 14  
tttttttttt ttttggggag gaaatcacgg cttcggatgc aacagtcttc tctcaattgg 60  
caactgtcta ttatccattc cgcaatcaca tttcggatgt tctcgaaaag gacttcccaa 120

agttattgga gtactgtgaa agagttcgtc atgaagttta cccaaaggac tttactatgt 180  
gaattaaatt gtcaaactag tagtcagatc aataaaattt tccgcgcgaa aaaaaaaa 238

<210> 15  
<211> 324  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 15  
tagttaggca caggatgtac gaggaatttc tactattttc gggctctcacc acgaaatcac 60  
aataacccgg atttttttagt ggtccccgca cgttgaccta cttggcgcgt caggcactcc 120  
gccgcgacat tcgccgacac gcctacaatc cacgtgtcaa tcgtcagatt tgcggatcaa 180  
taatggtgat gaaaggtgga aatacgtata tggatcatgt tcaaaggcat caagctgaac 240  
aattcgaaga gttgaatcgg cgtcgacaac tttttgatcc aagaccgtaa gaaatttgaa 300  
agctattggt gaaaaaaaaa aaaa 324

<210> 16  
<211> 272  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 16  
tggtactcca cgcagaaaga agaaggtcat ccacaacacc gctactaccg atgacaagaa 60  
gcttcaaagc aatttgaaga aaactctctgt caccaacatt ccaggaatcg aggaggtcaa 120  
catgattaag acgatggaac cgttatccac ttcaacaacc caaaagtcta aacctctgtt 180  
cccagccaat accttctctg tcacaggatc agccgataac aagtcagatc actgaaatgt 240  
ctcccaggga atgctgaact ggtcagagtc ct 272

<210> 17  
<211> 218  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 17  
tttttttttt tttcgacaag cggggactaa aagcaagctt ttcattccacc gatgatacaa 60  
ggcgttttta gtaccttagg atcgactgac ccacatccaa ctactgttcc acgtggaacc 120  
cttctccact tcagtcttca aggatcgaac ttgaatattt gctactacca tacgatctgc 180  
actgacggaa agtccagccg agcctacctc atagttaa 218

<210> 18  
<211> 238  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 18

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tttttttttt ttttgccggg cgggtgtgtac aaccggcagg gacgtaatca acgtgagctg 60
atgactcgcg cttactaggc attcctcggt taagggaat aattacaata ccctatcccc 120
gacatggaag aatttcaacg gtttaccgat acctttcaac acgggaaaaac taccgggttg 180
gacaccatta ggactgacag attgaaagtc tttgtcgatt tgggtggttg ttgtgcat 238
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<210> 19

<211> 253

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 19

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tagggcctgt tggttgatgc ttgtccggcg cagttctgtc tgcttgatac ttcggggttg 60
tggcggacta gtgattgtgc ttcttgcgga ccgtttctgg tgtgtgcttg gacctcggtt 120
ctagtatcct gatcgctcat ctatcaaccg tactgttaacc ggtacgactc agggaatccg 180
actgtctaataaaaacagag gtgacagatg gtccttgcg acgttaactg tcactgattt 240
ctccccagtg cac 253
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<210> 20

<211> 277

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 20

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tttttttttt tttggggggg gcggtgtgta caaagggcag ggacgtaatc aacgtgagct 60
gatgactcac acttctaggc attcctcggt taagggaata attacaatac ccatccccga 120
catggaagaa tttcaacggt ttaccgatac cctttcggca acacgggaaa actcaccggg 180
tccggacacc attaggactg acagattgaa agctctttct cgatttggtg gttggtggtg 240
catggccggt cttagtgtgt ggagtaccaa tcactag 277
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<210> 21

<211> 216

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 21

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tagcaagtgc ggagacaaat gtgaatgcag tggagacaag tgttgtaga agtactgctg 60
tgaggaggcc agtgagaaaa aatgctgtcc agctggatgt aaggagact gcaagtgtgc 120
aaactgtcat tgtgcagagc agaagcagtg cgagacaaga cccatcaaca ccagggaact 180
gctgcggctc attaaaatgt ttcagagttg aatcta 216
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<210> 22  
<211> 356  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 22  
caatcgatga gtatcctcgt acaattaatg catgatgcaa ttggaaatat tccgaggtag 60  
gtaaaacggg gaacatcacg agatagatga atacagcgga tatcatatag gcacgcagaa 120  
tatcaataaa attttcaaat tttcaaaaata tcataacgat tataacacgt agcagggaat 180  
tttaaagcca ctgaaataaa tatagaataa tatatacaga cacacacaat ctagatttca 240  
gaacattttc agtaacgacg tttgaacttt tttgaagatt tcgccgagcc tttgatcact 300  
tttgcagtca caacttccac aactttcttt tcctcctctt cctctacatc gattgc 356

<210> 23  
<211> 199  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 23  
taaactctat gtttatttgt tttttcaaat ttcaaattga aaattgaaac tttcaatttg 60  
attagagtct ttgtggtttg actccttttt ttcatgtgaac atctttttacg tacgtcatac 120  
ttttgtatac acattttacaa atgtttgtttt gtaattatat gtaacaaatt tctatgtaca 180  
cctcatctca tctctctat 199

<210> 24  
<211> 326  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 24  
cgtctccctt ttttacttac ttgtaggtgc gtcttgtcaa ttgtacgtac ttatatttag 60  
caaacctctg gtgttacctc tgcttttttg taaaatttgt tacacacttt ctttttggca 120  
gtaaaagtgt ttttagcacac tttaacactc tgccactacc aaggtaatag tgagcccatc 180  
gaggttttat aaatgtcctt gatagtttaa agtggttgag gatcgagcta ctttggtagt 240  
ggaaagccgt gtttcttgtc ttgttttgtt cgatgattta cccaactatt tgatattttg 300  
atttaccgga ttatataata cacc 326

<210> 25  
<211> 147  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 25  
tggcaatata cctagaaaga gtaaataatta tgacgtggca ataatacaga agcagtcgga 60  
actacaactc acgaaacatt ttgaaagttt acctcttgat ttcttttgaa tgttttgtct 120  
cacacaataa agaaaattct accgtac 147

<210> 26  
<211> 285  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 26  
cgtggcaata cacagaatat acacattgag atggttcgaa tggcaaagag aaggtggtgg 60  
ctaatacttc tatatagcac aacgccaaat ataatttcga tgtggcggaa tttgtgatgg 120  
tgaatggaat taacaaaatt ttctaaacgt cttcattccg agtaattttt cgttttccct 180  
ccacttttcg atttataattg ttttcttaga aaaagtattt attgcatcgg gtgctcattg 240  
tctttgtgta gaatataaac tcgttcactt cccaaaaaaa aaaaa 285

<210> 27  
<211> 216  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 27  
tagcaagtgc gagacaaatg tgaatgcagt ggagacaagt gttgtgagaa gtactgctgt 60  
gaggaggcca gtgagaaaaa atgctgtcca gctggatgta agggagactg caagtgtgca 120  
aactgtcatt gtgcagagca gaagcagtgc ggagacaaga cccatcaaca ccagggaact 180  
gctgcggctc attaaaaatgt ttcagagttg aatcta 216

<210> 28  
<211> 142  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 28  
gtgctggagt tgtttgtatt tcagaataaa taaaataaaa tatgatttga gtagaatatt 60  
aaaaataaagt ccttcacatt aaattatcaa ttgcttggcc tcgaatatct tccagctggg 120  
gattgcattc gttcattcct tc 142

<210> 29  
<211> 84  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 29

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tagcaagtgc ggagacaaat gtgaatgcag tggagacaag tgttgtgaga agtactgctg 60
tgaggattcc agtgagaaaa aatc                                     84
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<210> 30

<211> 217

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 30

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tagcaagtgc ggagacaaat gtgaatgcag tggagacaag tgttgtgaga agtactgctg 60
tgaggaggcc agtgagaaaa aatgctgtcc agctggatgt aaggaggact gcaagtgtgc 120
aaactgtcat tgtgcagagc agaagcagtg cggagacaag acccatcaac accagggaac 180
tgctgcggct cattaaaaatg tttcagagtt gaatcta                             217
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<210> 31

<211> 292

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 31

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tggtactcca cacggacaaa tacatttagt tttacaagcc gccacgcgac acgcaacgcc 60
gtaaactctac caaggtacaa caacaacatg tcaagcacag acccatatct tatttgtgcg 120
gaacgagatg gcctctactg tagtaatcga caattggact cttatccacc ggatcactta 180
acctattttg atattaatat tcctattggg atcacagggt ttgcccgaac atgtaattat 240
gaactgaatt gaaatgtatt ataaattagt ttttattggg aaaaaaaaaa aa          292
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<210> 32

<211> 188

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 32

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tatagggttaa gtgatccggt ggataagagt ccaattgtcg attactacag tagaggccat 60
ctgcttccgc acaaataaga tatgggtctg tgcttgacat gttgttgttg taccttgggt 120
agatttacgg cagttgcgtg tcgttggcgg cttgtaaaac taaatgtatt tttccgtgtg 180
gagtacca                                     188
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<210> 33

<211> 289

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 33

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tttttttttt ttttgtacat tatggcaaat ggaggcactg tctggttccg tgggggtcatg 60
gtgcattgga tcatgggtata tcctatcctg gcttctaata ccaatgcgtt tacagtcag 120
tgggcttgaa cgggcctagc tgagcttgga caaagttcct tgacagtacg ggtcgacaag 180
cttgacagtc agaaattagg cacttggtggg ctacaggtgc tcgtaattat tttgagagtt 240
ctgggcttcc ggactttttac taggctaata taagacaact gggctctaa 289
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<210> 34

<211> 214

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 34

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aaatcatggc ggcggatgca acagtcttct caattggcaa ctgtctatat cattccgcaa 60
cacatttcgg atgttctcga aaaggacttc ccaaagttaa tggagtactg tgaaagagtt 120
cgtcatgaag tttcccaaaag gactttacta tgtgaattaa attgtcaaac tagtagtcag 180
atcaataaaa ttttacgtgg aaaaaaaaaa aaaa 214
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<210> 35

<211> 322

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 35

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taggtgaccg tagagaagcc cagatatatta aaatctaaag ggaaactgtt tgaccagaag 60
attagagccc agttgtctta gatagcctag taaaagtccg gaagcccaga actctcaaaa 120
taattacgag cacctgtagc ccacaagtgc ctaatttctg actgtcaagc ttgtcgaccc 180
gtactgtcaa ggaactttgt caagctcagc taggcccggt caagcccaca tgactgtaaa 240
cgattcgga ttagaagcca ggataggata tccatgatcc aatgcaccat gacccacgga 300
accagatgtg ctcattacat ag 322
```

<210> 36

<211> 228

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 36

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tttttttttt tttcccatc catcacacac tatcatgttt tatattcaga cctattacct 60
gtccagaaaa actgagctga aaaaatcccg gacgagcagc tccttcacat tcaaaatctt 120
ccatcatttc cccactcaat tcatttggtt tgtctttgat tttcaaattt ttgccttat 180
tattttattg ctaaattaag aaaactgtta ctttgcaaaa aaaaaaaaa 228
```

<210> 37  
<211> 255  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 37  
atcattcaag aaagctatta tcagaaaaca taaatgacat agatcaagtg taaatcacat 60  
atatataaag tggataaata tatatagtta aacggataag gaaattaatt aatgaatttt 120  
gaaactggca gcgaaggatg aacagggaaa ggcacatggt aaaataaatg aatgtgtata 180  
atttcgtgaa gagttagtta tgtaggtga tggcagccat gcagaatgag ccattgttcc 240  
gaaaaaaaaa aaaaaa 255

<210> 38  
<211> 433  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 38  
tggactaag ggccaataac tgagcttttg cacggcggca tcaatgataa agagaaacta 60  
tttttgacgg ttaaaataac caaatTTaca ccggcgagtc aatcaaaaat tctcatctgg 120  
aacagcaaag tacatcggag aattgctgga aggaagcact gatgaaacta aattaactgc 180  
tggatgcata ggaaaaacgt caagattgac gtggagtgg agagaaggac tatgtttgga 240  
tggttactaa gattttgtta ctggtgacaa taaggacatc acttttctaa ctaacttaaa 300  
ttctttttta cttcttttct tctgaattaa ttgtgtttta aggcgaattc tatgtttcag 360  
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aaaaaaaaaa aaa 433

<210> 39  
<211> 933  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 39  
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ttattactgc tgcgctgttt ggagccgctg tcatttactt gaaaaatttc ttactgttgc 120  
ctagcattaa accaaaacct gatattcaca aaaaagacta caaaaaggat gtagtctatc 180  
tgtatcagat gaagagactc aagaactgtc cgaactgtc ccctttctgc atgaaaatcg 240  
agattctttg tagaatcttc aagattcctt acgagattat cacatgcacc tctgaacgct 300  
ctcggaatgg attggtccct ttcgttgaac tcaatggaga gcacattgct gattctgatc 360  
ttatcgaaat gcgcttgaga tcacatttta aaattccgtc gcttccaact gagctggaaa 420  
ctcaatctgt tgctctaagc aagtttgcag atcaccattt gttcttcgta cttatacgat 480  
ttaaaattgc tgctcgacgaa ttctacaaaa ccattatcga aataatcggc ctcccaacct 540  
tcctgaattt ctttctcatg ccccttttga aggctataat cgggaaaaat gtctacaaca 600  
aatgtcaggg agccattgga gatTTtgaat tgagtggagc cgacgagatt cttcacagag 660

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atttgcgaat cgtagagaac accttggcca agaaaaagtt tcttttcggg gaggaaatca 720
cggcggcgga tgcaacagtc ttctctcaat tggcaactgt ctattatcca ttccgcaatc 780
acatttcgga tgttctcgaa aaggacttcc caaagttatt ggagtactgt gaaagagttc 840
gtcatgaagt ttacccaaag gactttacta tgtgaattaa attgtcaaac tagtagtcag 900
atcaataaaa ttctacgtgg caaaaaaaaaaaa aaa 933

```

```

<210> 40
<211> 238
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence: Probe

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<400> 40
tttttttttt tttgggagga aatcacggcg gcggatgcaa cagtcttctc tcaattggca 60
actgtctatt atccattccg caatcacatt tcggatgttc tcgaaaagga cttcccaaag 120
ttattggagt actgtgaaag agttcgtcat gaagtttacc caaaggactt tactatgtga 180
attaaattgt caaactagta gtcagatcaa taaaattcta cgtggcaaaa aaaaaaaaaa 238

```

```

<210> 41
<211> 248
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence: Probe

```

```

<400> 41
tttttttttt tttcgcattg tgtaatacta atatttatta attttcttta attttctttg 60
ttaagtttgt atttataggt tggtgagatt tttttgcctg taattttgca actgtgattc 120
atgtatgtac tatatgaacc gaaacccctt cccgtcatac acaacagtta gtaaaacatt 180
ttaatcccat atttctcatt cccaacactc ttacaggttt tgcattcagca gcagcagttg 240
aaacacaa 248

```

```

<210> 42
<211> 226
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence: Probe

```

```

<400> 42
tttttttttt ttttgaaca aagaactgag cactctatgg tttatcaagt ctatatgtat 60
ccgtgatgcc tactgtatcg tacatccatc tcgatcgtaa tgcattattg atcatgagtt 120
cccaaaggct ttaatcttga caaagggtgca atagatatat atccttattt ggcaactatat 180
atatgttcag aattatgact gatcgatata tatgatcaaa gttaca 226

```

```

<210> 43
<211> 212
<212> DNA
<213> Artificial Sequence

```

<220>

<223> Description of Artificial Sequence: Probe

<400> 43

```
ttcgatacag gaactacatt tacatctgtt tcaacatata aacaatacat aacataactca 60
atccttcagg ctctgaagga ttttgagtgc gatatactgt aacaagctcg ggaaacataa 120
gtacattttt tggagctatc tttttatggt gcgcttttct tttgtctctt tgaatgagtt 180
ttgaaatgaa ttgtctgtgc aaaaaaaaaa aa 212
```

<210> 44

<211> 284

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 44

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tggtactcca cacggacaaa tacatttagt tttacaagcc gccacgcgac acgcaacggc 60
cgtaaatcta cccaaggtag aacaacaaca tgtcaagcac agaccatat cttatttggg 120
cggaaggatg gcctctactg tagtaatcga caattggact cttatccacc ggatcactta 180
acctattttg atattaatat gcctgattgg ggatcacagg gtttgcccga aaatgtaatt 240
atgaactgaa ttcgaaatgt atttataaat tagtttttat tggg 284
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<210> 45

<211> 214

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 45

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gcaagtgcgg agacaaatgt gaatgcagtg gagacaagtg ttgtgagaag tactgctgtg 60
aggaggccag tgagaaaaaa tgctgtccag ctggatgtaa gggagactgc aagtgtgcaa 120
actgtcattg tgcagagcag aagcagtgcg agacaagacc catcaacacc agggaactgc 180
tgcggctcat taaaatgttt cagagttgaa tcta 214
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<210> 46

<211> 217

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 46

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ttagcaagtg cggagacaaa tgtgaatgca gtggagacaa gtgttgtagg aagtactgct 60
gtgaggaggc cagtgaagaa aaatgctgtc cagctggatg taaggagagac tgcaagtgtg 120
caaactgtca ttgtgcagag cagaagcagt gcgagacaag acccatcaac accaggggaa 180
tgctgcggct cattaaaatg tttcagagtt gaatcta 217
```

<210> 47  
<211> 217  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 47  
ttagcaagtgc cggagacaaa tgtgaatgca gtggagacaa gtgttgtag aagtactgct 60  
gtgaggaggc cagtgcagaaa aaatgctgtc cagctggatg taaggagac tgcaagtgtg 120  
caaactgtca ttgtgcagag cagaagcagt gcgagacaag acccatcaac accagggaac 180  
tgctgcggct cattaaaatg tttcagagtt gaatcta 217

<210> 48  
<211> 216  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 48  
tagcaagtgc ggagacaaaat gtgaatgcag tggagacaag tgttgtgaga agtactgctg 60  
tgaggaggcc agtgagaaaa aatgctgtcc agctggatgt aaggagact gcaagtgtgc 120  
aaactgtcat tgtgcagagc agaagcagt gcagacaaga cccatcaaca ccagggaact 180  
gtgcggctc attaaaatgt ttcagagttg aatcta 216

<210> 49  
<211> 240  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 49  
tttttttttt ttgagactat gaatatttaa tttagcaagc gaatttggtt ttattagata 60  
ggaagcctag aagagtgaat attttaaaaa atgtgaggaa ctggttttgt attcagaagc 120  
atataaacgt tgtcttaatt tatatatgac gttctctatg aatatagcca aaatgatcga 180  
tatttttaat ccaaaaatca aacatttttg gtatacgaac ctgccttca cggaggttta 240

<210> 50  
<211> 217  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 50  
tttttttttt ttttgggagg aaatcacggc ggcggatcga acagtcttct ctcaattggc 60  
aactgtctat atcattccgc aatcacattt cggatgttct cgaaaaggca ttccaaagtt 120  
attgagtcga tgtgaaagag ttcgtcatga agtttaccca aaggcatttc atagtgaatt 180

aaattgtcaa actagtagtc agatcaataa aatttttc

217

<210> 51

<211> 219

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 51

tttttttttt tttgacgaca aattattttag aaatattgca taagcgaaaa tacaatttga 60  
cccgtagcaa aaaaatacat gtcgggaaaa tgagaaaaat ggtaataaaa tttttaaaaa 120  
aagtatataa ttcctccaac aagctactgc atgtccttgt actacaatct tctccgacgg 180  
attccactct cgatcgcgga ttcggattct tcatgttgg 219

<210> 52

<211> 254

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 52

tttttttttt tttttgcca tcggaaaata gcaagcctct ccacaggtac agtaattgag 60  
catttgatg atgcttcttc acagcattat ccagtgtata cttatccttt ttcgtaagag 120  
tttcgaaaaa atgtccataa aaagtgttga atgacttttg ttcattctga agcatacata 180  
cgatcgaaac ggagaaatcg atagatcgaa tcaggataag tggggatact gtattgtcgg 240  
atgaaaacat agac 254

<210> 53

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 53

aggtgaccgt

10

<210> 54

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 54

ggtactccac

10

<210> 55  
<211> 10  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 55  
gcaatcgatc 10

<210> 56  
<211> 10  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 56  
ccgaagggaat 10

<210> 57  
<211> 10  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 57  
ggattgtgcg 10

<210> 58  
<211> 10  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 58  
cgtggcaata 10

<210> 59  
<211> 10  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 59

tagcaagtgc

10

<210> 60

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 60

agttaggcac

10

<210> 61

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 61

agggcctggt

10

<210> 62

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 62

ctgagctagg

10

<210> 63

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 63

tacaacgagg

10

<210> 64

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 64

tggattggtc

10

<210> 65

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 65

ctttctaccc

10

<210> 66

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 66

ttttggctcc

10

<210> 67

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 67

ggaaccaatc

10

<210> 68

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 68

aaactccgtc

10

<210> 69

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 69

tcgatacagg

10

<210> 70

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 70

tggtaaaggg

10

<210> 71

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 71

tcggtcatag

10

<210> 72

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 72

ggtactaagc

10